

Tuxedo

Howland
Canada
Nov

Howland Is.
18-20 November 1966
Bob. Tuxson

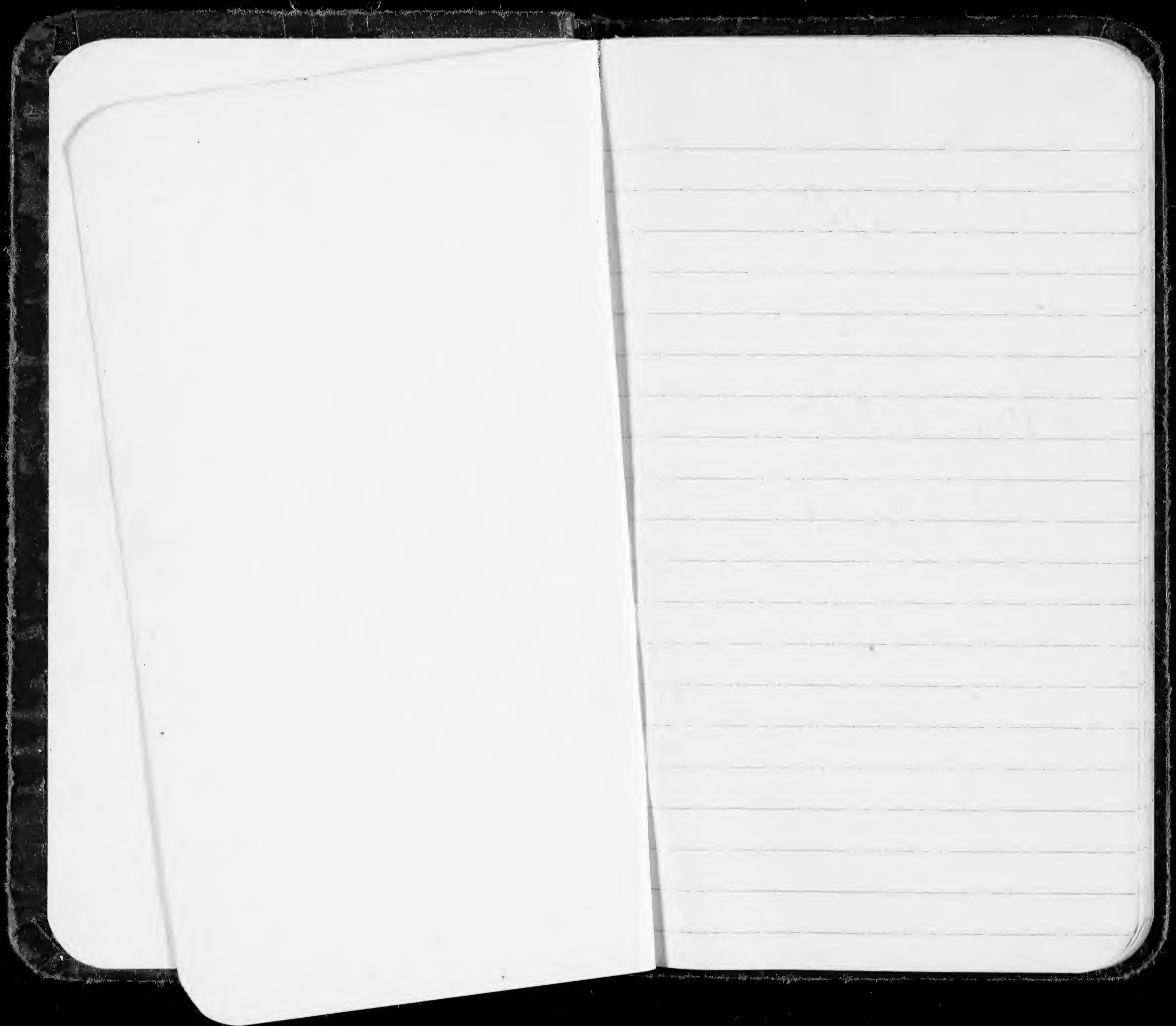
HOWLAND ISLAND

18 NOV, 1966

TUXSON



✓ AD
CPA
Done 8/26/68



TUXSON

Howland
Island

18 Nov. 1966

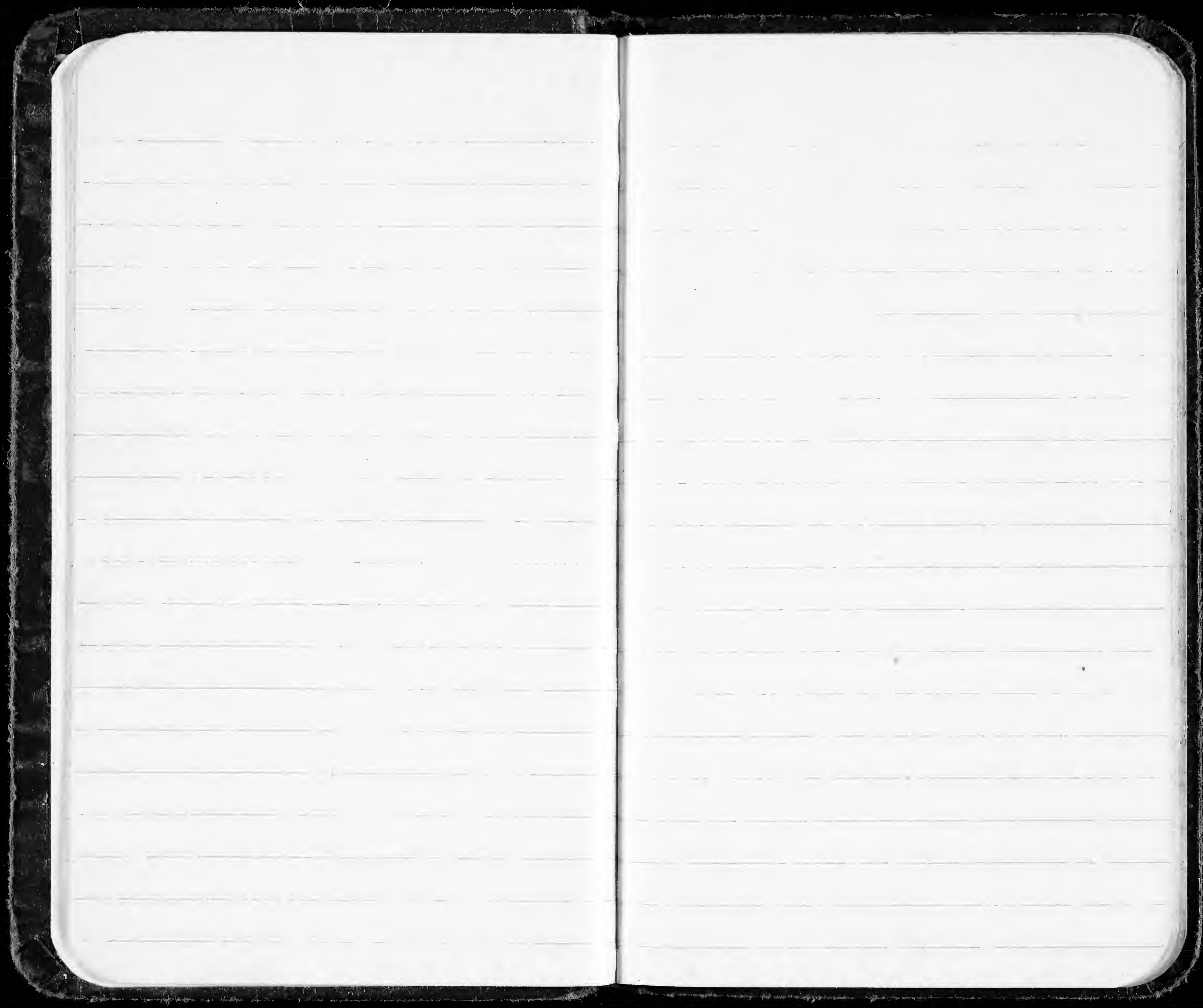
19 Nov. - Howland

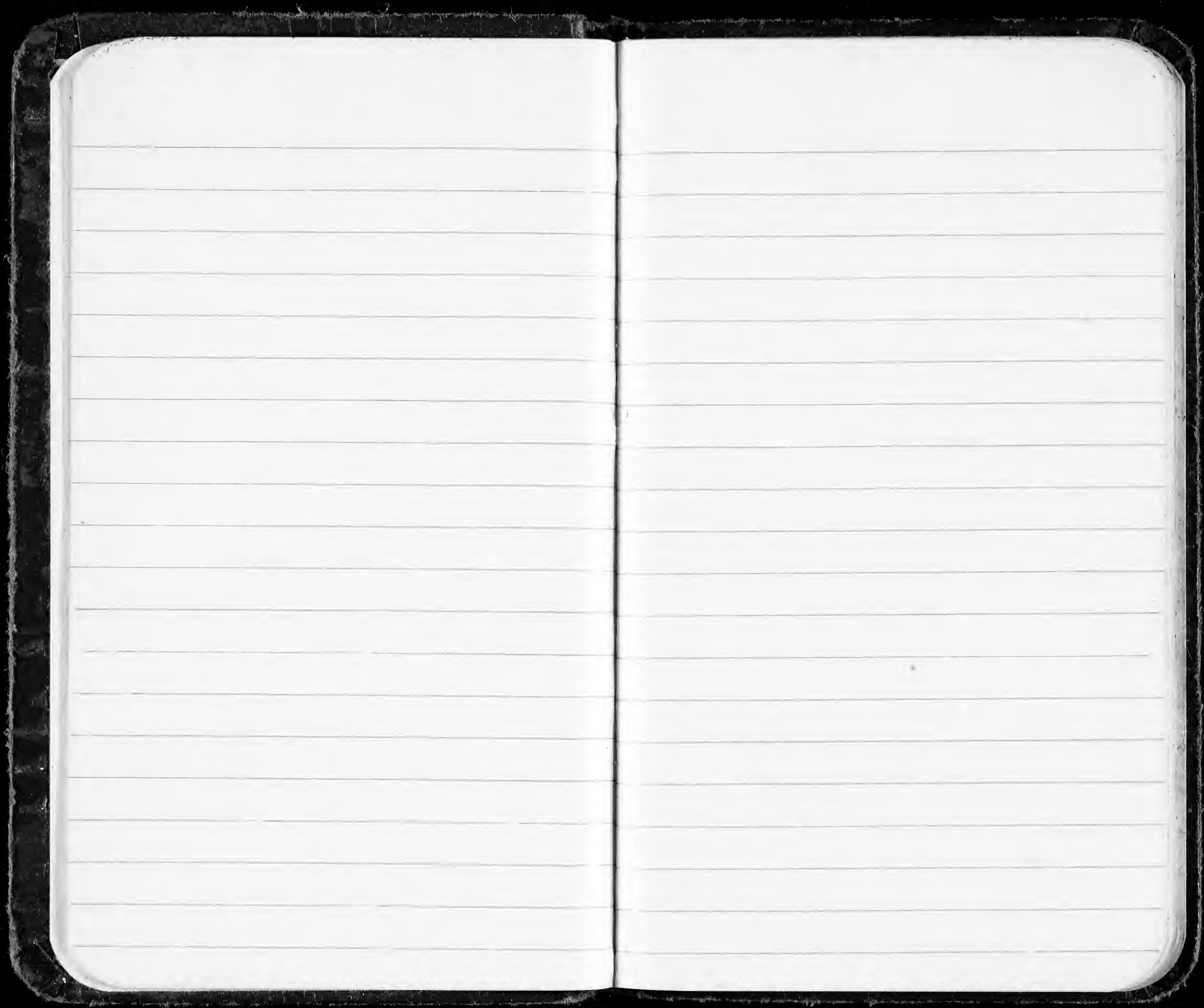
Bands closed

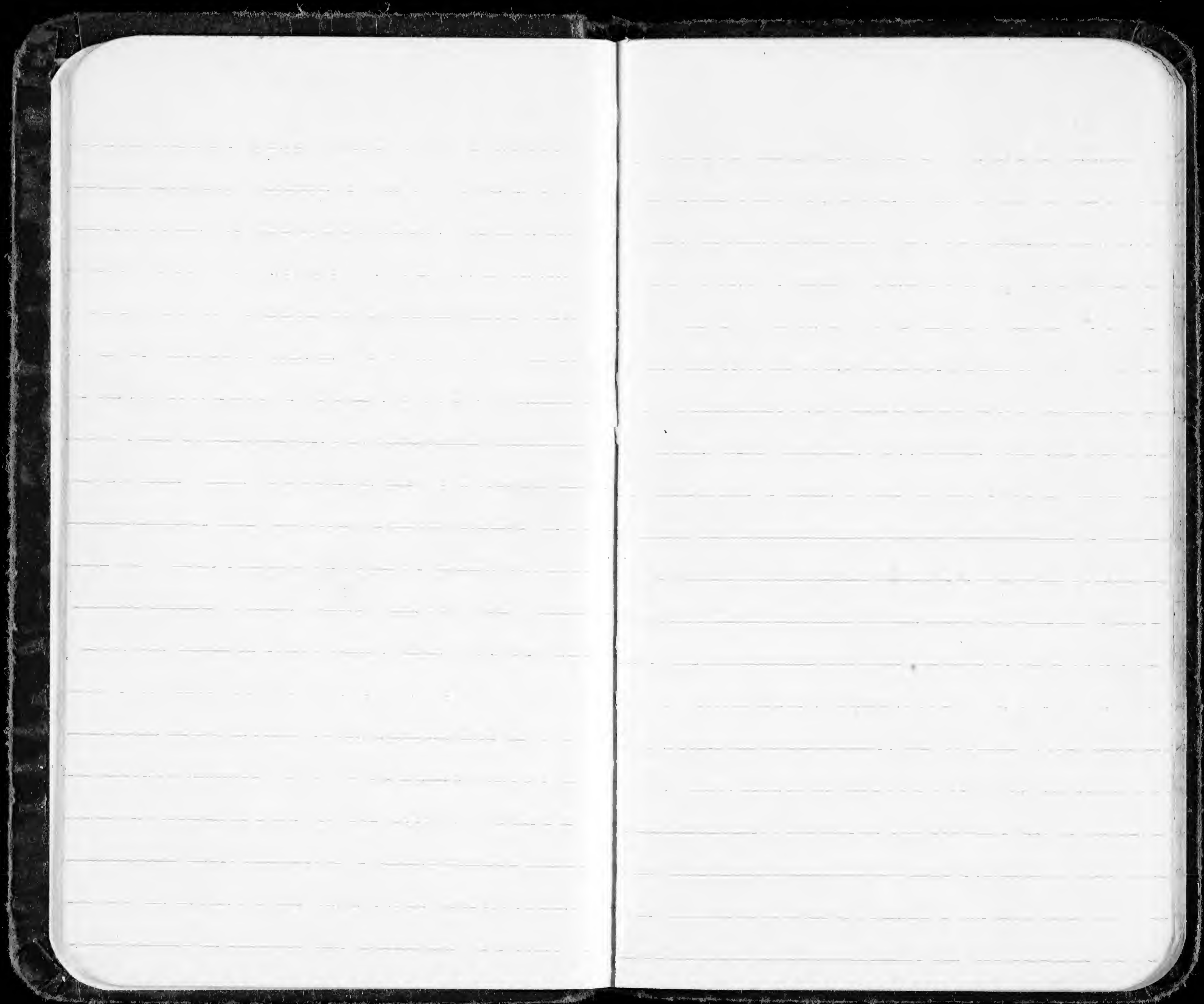
757-61068-61084

all bands used

#68-lost







18 Nov. Howland

RFB 285 441 + 1 + 1
(5 total) total count

GF 2 locals total count

18 Nov

Shorebird Count (10 total)
R.T.

RT - 6 in one flock
~~4 in another~~
(1 painted bird)

18 Nov.

TOTAL
(1510)

LESSER FRIGATE
eggs

small 4 + 8 + 13 + 1 + 4 + 11
(41) total count

large 43 + 9 + 4 + 3 + 33 +
58 + 45 + 159 + 55
+ 16. (315) total count

local 15 + 27 + 47 + 41 + 18
73 + 85 + 56 + 70 + 82
91 + 30 + 70 + 76 + 200
34 + 53 + 116 (1154) total count

Lesser
Frigates

18 Nov. 1966

Barfon ground
stewed both
squid and flying
fish are eaten.

✓ ADP

RECOVERY

19 Nov.

BFB - Sera death

{ 737-27757 ✓
737-28563

737-28516

737-23617

737-39616 ?

737-28507
737-53466

What are these ?

19 Nov.

Howland

SHORE BIRD COUNT

RT - ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~
[12 - Flock] + ~~||||~~ ~~||||~~ 61
WT - ~~||||~~ ~~||||~~ 10

BTC - ~~||||~~ Flock - 7 } 12

C.P. - ~~||||~~ ~~||||~~ ~~||||~~ 16

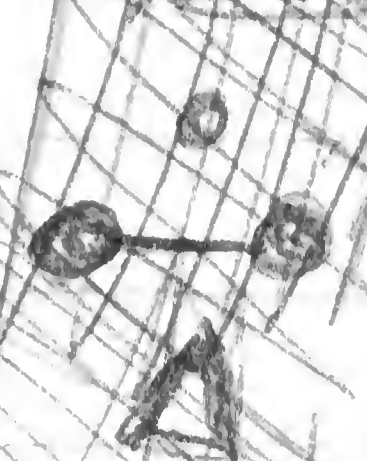
Gray Back Tern - 2 flying
near North end of island
& 15 sitting on beach

Total - 17

~~Notes~~

~~Notes~~

Notes



□

T

red streamers

7

#

red streamers

III

red streamers



Status

empty

empty

empty

empty

empty

medium density

empty

empty

empty

empty

empty

empty

empty

empty

empty

empty

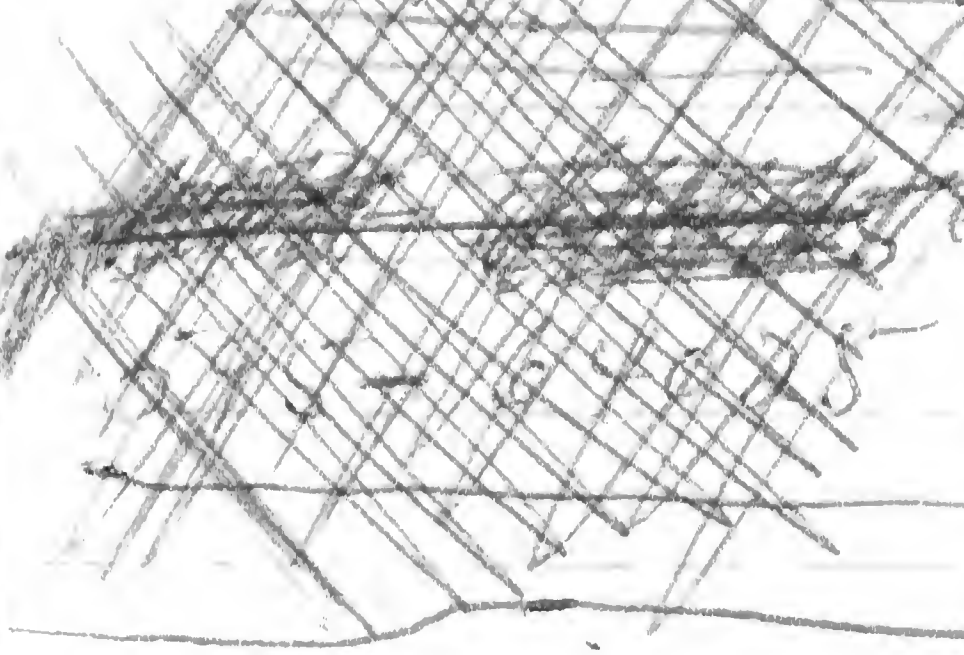
Notes

~~Notes~~

New

Rejoins

Colon Mark



T

~~one of the first
I saw this year~~

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✓ ADP

19 Nov RETURNS

RED TAILED TROPIC BIRD

- { 595-64025 - in empty nest ✓
625-85713 - on one egg ✓
625-85738 - on one egg ✓

19 Nov

RTTB

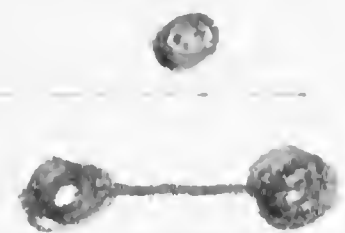
Tropic bird nest sites on the side of island were worked:

- ① - Repainting of all nest sites
- ② - painting of new nest sites
- ③ - each nest site not given a color mark was given one.
- ④ every nest site was recorded as to its contents
- ⑤ adults in the nests were color coded the same marking as the nest site.
- ⑥ 3 returns were taken
- ⑦ 2 ~~un~~banded birds were seen, one ^{was} color marked but not banded.

Red Tailed Tropic Bird

Nests

status



empty



large downy chick



empty

T - 2 red streamers

empty



adult in breed. pl.

medium sized downy chick

31 - ‡

empty

4 IIII

empty

5

empty

6

empty

9

empty

2 2 red streamers

empty

8 2 red streamers

empty

35

empty

43

empty

11 +

empty

44

empty

new - ⊕

adult in breeding pl.

new - W

adult on small chick

19 Nov 1966

adult

color code or mark

595-64025

T

not banded

not marked

not banded

W

19 Nov

RTTB

nest	status
37	empty
12	empty
38	empty
39	empty
14	empty
15	empty
40	empty
17	empty
45	empty
16	empty
new - Z	adult on egg - new tail feather in
20	empty
19	empty
18	empty
41	empty
≡	adult on egg
42	empty
26	empty

19 Nov

RTTB

adult	color code
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
625-85713	Z
_____	_____
_____	_____
_____	_____
_____	_____
625-85738	≡↑
_____	_____
_____	_____

19 Nov

note

27

24

25.

47.

66

48.

49

status

crystals

~~empty~~

empty

commatur

emigrants

empty

energy

adult

11

19 Nov

color mark

—

ADP
Returns
19 Nov-

BFB
Nocturnal

RETURNS SEX STATUS

737-20673	✓	♀	2 eggs
737-20604	✓	♀	roosting
737-28981	✓	♀	immature
737-82402	✓	♀	roosting
737-20046	✓	♀	immature
737-20671	✓	♂	
737-20798	✓	♀	immature
737-23572	✓	♀	roosting
737-27603	✓	♀	1 egg
737-28815	✓	♀	2 eggs
737-20810	✓	♀	roosting
737-23614	✓	♀	immature
737-39535	✓	♂	
737-28641	✓	♀	roosting
737-28864	✓	♀	2 eggs
737-28521	✓	♀	1 egg

19 Nov. BFB
COUNT

ADULTS-
IMMATURES
SUBAD - 1 (1) 140 total

B. B. 54 total
BB SUBAD 1 (1)

BFB Fchyl - 70, 49 (723)
43, 29

Adults
+32+5

19 Nov
VADP

BFB

Returns

Band #	Sex	Returns
737-49792	✓ ♀	small chick
587-83631	✓ ♂	roosting
737-53135	✓ ♂	leg
737-28785	✓ ♀	immature
587-80847	✓ ♀	2 eggs
737-27514	✓ ♂	1 egg
737-82410	✓ SA	
737-20910	✓ ♂	2 eggs
737-27852	✓ ♀	2 eggs
737-49714	✓ ♂	2 eggs
737-53472	✓ ♀	small chick
737-39925	✓ ♀	2 eggs
737-39632	✓ ♀	immature
737-39924	✓ ♂	small chick
737-49814	✓ ♀	immature
568-72196	✓ ♀	Club Burnt
568-70560	SA	club
757-65329	♀	imm
737-49531	♂	imm

19 Nov

VADP
Returns BFB

Band #	Sex	Returns
737-20656	✓ ♂	large chick
737-28673	✓ ♂	roosting
737-28941	✓ ♀	immature
737-23570	✓ ♀	2 eggs
587-82505	✓ ♀	immature
737-49794	✓ ♂	Roosting
737-49754	✓ ♂	"
737-20105	✓ ♀	"
737-28927	✓ ♂	"
587-85040	✓ ♀	
737-49743	✓ ♀	leg
737-28939	✓ ♂	imm
737-27931	✓ ♀	Roosting
587-80823	✓ ♀	immature
737-20623	✓ ♀	1 egg
737-49663	✓ ♂	Roosting
737-20817	✓ ♂	small chick
737-20856	✓ ♂	Roosting
737-20521	✓ ♂	Legg

✓ADP 19 Nov. Returns BFB

737-20868 ✓ ♂+ immature
 737-20870 ✓ ♂+ "
 757-65264 ✓ ♂+ immature
 757-39850 ✓ ♂+ "
 737-20980 ✓ ♀ Roosting
 737-20630 ✓ ♂ immature
 737-23567 ✓ ♂+ "
 737-28976 ✓ ♂+ large chick
 737-20867 ✓ ♀ immature
 737-20865 ✓ ♂+ roosting
 737-20679 ✓ ♂+ immature
 737-20619 ✓ ♀ "
 737-27847 ✓ ♂+ immature
 737-28788 ✓ ♂+ roosting
 737-20864 ✓ ♀ "
 737-49765 ✓ ♀ large chick
 568-71335 ✓ roosting
 737-20750 ✓ ♂+ 1 egg

19 Nov. ✓ADP BFB

737-39689 ✓ ♀ 2 eggs
 737-27904 ✓ ♀+ "
 757-65014 ✓ ♂+ roosting
 737-53258 ✓ ♀ "
 587-88324 ✓ ♀ roosting
 737-20749 ✓ ♀ "
 737-20828 ✓ ♀ "
 737-53352 ✓ ♂+ large chick
 737-82441 ✓ ♀+ large chick
 587-82812 ✓ ♀+ "
 737-20753 ✓ ♀ 2 eggs
 737-27754 ✓ ♂+ roosting
 737-37819 ✓ ♀+ 2 eggs WS
 737-27153 ✓ ♂+ WS
 737-27861 ✓ ♂+ roosting
 737-82813 ✓ ♀ roosting WS
 737-53275 ✓ ♀ "
 737-27949 ✓ ♀ "

VADP

19 Nov BFB

Returns

737 44683 ✓ roosting

587 85050 ✓ "

737 20878 ✓ "

737 23504 ♀ ✓ chick

737 23505 ♂ ✓ "

737 49718 ♂ ✓ immature

737 20850 ♂ ✓ roosting

737 82455 ✓ large chick

737 2696 ✓ roost

737 23514 ✓ imm

757 67200 ✓ roost

737 27822 ✓ "

737 49704 ♂ ✓ large chick

737 27747 ✓ roosting

* 737 43725 ✓ roosting

737 53413 ✓ large chick

737 49669 ✓ "

737 28793 ✓ roosting

Not counted as per code

Returns 19 Nov BFB

VADP

737 28829 - ♂ ✓ roost

587 80895 ♀ ✓ 2 eggs

737 39704 ♀ ✓ roost

737 82443 ♀ ✓ "

587 65185 ♀ ✓ "

737 20746 ♂ ✓ immature

737 49671 ♀ ✓ roost

737 49839 ♂ ✓ roost

587 80838 ♂ ✓ "

737 27805 ♀ ✓ "

737 53272 ♀ ✓ "

737 53349 ♀ ✓ immature

737 27815 ♂ ✓ "

737 53344 ♀ ✓ 2 eggs

737 49687 ✓ "

737 28647 ✓ roosting

737 28580 ✓ "

737 62276 ♀ ✓ prob 757

737 85031 ♂ ✓ "

✓ADP

19 Nov RETURNS

Brown Booby

- 737-53013 - large chick ✓
 737-53018 - large chick ✓
 737-53072 - 2 eggs ✓
 737-28623 - 2 eggs ✓
 737-53051 - 2 naked chicks ✓
 757-64178 - 1 small chick + 1 egg ✓
 737-20906 - 1 egg ✓
 737-53033 - large chick ✓
 587-83623 - 2 eggs ✓
 737-81539 - SUB AD ✓
 587-82373 - 2 eggs ✓
 737-27701 { ♂ ✓ roosted
 737-20985 { ♀ " ✓
 737-20523 { ♀ " ✓
 737-53160 { ♂ " ✓

Blue-face ↑

✓ADP

14 Nov

Returns

BFB

- 737-28931 ✓ ♂ roost ✓
 737-28658 ✓ ♂ " ✓
 737-53235 ✓ ♂ Red paint ✓
 737-53292 ✓ ♂ roost ✓
 737-53259 ✓ ♂ large chick ✓
 737-53438 ✓ ♂ " ✓
 737-28853 ♀ ✓ roost ✓
 587-81876 ♂ " ✓
 737-49858 ♂ " ✓
 737-39910 ♀ imm ✓
~~737-20801 ♀ roost ✓~~
~~737-85704 ♀ roost ✓~~
 737-39992 ♂ 2 eggs ✓
 737-26698 ♀ roost ✓
 737-53416 ♂ small chick ✓
 737-53251 { ♀ egg ✓
 737-39993 { ♂ egg ✓

19 Nov Returns ADP
BFB

737 38940 ♀ Roosting ✓
 737 53407 ♂ Immature ✓
 737 20731 ♂ Immature ✓
 737 28533 ♂ Eggs ✓
 737 39950 ♀ Immature ✓
 757 65154 ♀ Roosting ✓
 737 49632 ♂ " ✓
 737 28637 ♀ ✓
 737 49528 ♀ Small ✓
 X 737 80798 ♀ Roosting ✓
 737 20730 ♂ " ✓
 737 39961 ♀ Immature ✓
 737 27983 ♀ Roosting ✓
 737 28781 ♀ Eggs ✓
 587 83435 ♂ Roosting ✓
 737 39746 ♂ Roosting ✓
 757 6305 ♂ Duck ✓
 737 29945 ♀ " ✓

19 Nov Returns ADP
BFB

737 20819 ♂ Roosting ✓
 587 83432 ♂ Immature ✓
 737 26688 ♀ 3 eggs ✓
 587 83607 ♀ 2 eggs ✓
 737 49824 ~~49824~~ ♂ 2 eggs ✓
 737 39914 ♀ Roosting ✓
 737 39716 ♀ Immature ✓
 737 49596 ♀ " ✓
 737 49597 ♂ Immature ✓
 737 21265 ♀ " ✓
 737 39965 ♂ 2 eggs ✓
 737 39964 ♀ 2 eggs ✓
 737 39887 ♀ Immature ✓
 737 39775 ♂ " ✓
 737 26685 ♂ R ✓
 737 49609 ♀ " ✓
 737 39896 ♂ Eggs ✓
 737 39738 ♀ 2 eggs ✓
 587 83608 ♂ " ✓

Returns

19 Nov ✓ADP BFB

737 39754 ♂ imm

737 37593 ♂ imm ✓

737 49590 ♀ ✓

737 - 39697 ♂ imm ✓

737 37599 ♀ imm ✓

737 49745 ♀ 2 eggs

737 49600 ♀ imm ✓

737 39871 ♂ II ✓

737 39890 ♀ 2 eggs

737 39840 ♀ Roost

737 39861 ♀ imm ✓

737 39649 ♂ Roost

737 39680 ♀ ✓

737 27600 ♀ 2 eggs

737 39647 ♂ small chick

19 Nov ✓ADP Returns

737 39667 ♀ 2 eggs ✓

737 37589 ♀ imm ✓

Banding 19 Nov.

61068 - lost BFB

69 - immature

70 - ♀ - roosting

71 - immatures

72

73 ♂ - roosting

74-79 - immatures

80 ♀ - 2 eggs

81 ♂ - roosting

82 ♀ chick

83 ♂ - roosting

84 immature

✓ADP

20 Nov Returns BFB

- ✓737-23703 ♂ with ♀ ✓
 ✓737-23571 ♂ roosting
 ✓737 20690 ♀ immature ✓
 ✓737 82403 ♀ roosting
 ✓737 20793 ♂ immature ✓
 ✓737 27426 ♀ with ♂
 ✓737 20788 ♂ 2 immatures
 ✓737 49860 ♀ small chick
 ✓757 63388 ♀ small chick
 ✓737-53481 ♂ immature
 ✓737-27801 ♀ immature
 ✓737 53473 ♂ "
 ✓737 39520 ♂ immature
 ✓737-39603 ♂ immature
 ✓737-20829 ♀ roosting
 ✓737-39806 ♀ immature
 ✓737 23561 ♀ with ♂
 ✓737 39529 ♀ immature
 ✓737 22672 ♀ with ♂

✓ADP

20 Nov Returns BFB

- ✓737 82026 ♀ large chick
 ✓737 28530 ♂ 1 egg
 ✓737 27787 ♀ roosting
 ✓587-85029 ♀ immature
 ✓737 39516 ♂ 2 eggs
 ✓737 27774 ♀ 1 egg
 ✓737 53104 ♀ roosting
 ✓568-70004 sub adult
 ✓737 39588 ♀ 2 eggs
 ✓737 28925 ♂ with ♀
 ✓558-85050 ♂ roosting
 ✓737-28522 ♀ "
 ✓737-20547 ♂ immature
 ✓737 27933 ♀ "
 ✓587-83247 ♀ immature
 ✓737 28873 ♀ "
 ✓737-28797 ♂ small chick
 ✓737 53118 ♀ 1 egg
 ✓737-53121 ♀ roosting

✓ADP

20 Nov. Returns BFB

✓737 49752 - ♂ roosting
 ✓737 28783 ♂ "
 ✓737 53114 ♀ "
 ✓737 39805 ♂ "
 ✓737 27951 ♂ immature
 ✓587- 84001 ♂ inter."
 ✓737 - 28653 ♂ large ch.
 ✓737 39586 ♀ immature
 ✓737 28937 ♂ roosting
 ✓737 82038 ♀ roosting
 ✓737 39522 ♀ immature
 ✓737 28579 ♂ "
 ✓737 28792 ♂ naked ch.
 587- 85026 - ♂ large ch.
 737 53489 - ♀ roosting
 ✓737 49653 ♂ roosting
 ✓737 39571 ♂ "
 ✓737 53363 ♂ immature
 ✓737 82012 ♂ "

✓ADP

20 Nov. BFB Returns

✓737 20802 ♂ 2 eggs

✓ADP

Returns 20 Nov.

Brown Booby

737 53044 → 2 eggs ✓
737 53013 - large chick ✓
737 53012 - 2 eggs ✓
737 53066 - 2 eggs ✓

20 Nov - Hawland

RTTB - 2 unmarked
adults observed
flying overhead.

BTC - 2 individuals
seen foraging south
of camp today
at 1500. They were
at the high tide
line.

South east side

20 Nov.

BFB.

Count -

nocturnal

AD - painted

AD - not

2, 1, 1, 2, 1, 1, 1, 1

13, 1, 2, 1, 3, 2

1, 2, 1, 1, 1, 1, 1, 1

2, 2, 2, 3, 1, 2, 1

~~1, 1, 1, 1, 1, 1, 1, 1~~

2, 4, 2, 4, 2, 17, 15

5, 3, 2, 1, 1, 1, 1, 1

4, 1, 4, 20, 4, 18, 1

2, 2, 1, 1, 1, 1, 1, 1

7, 5, 9, 3, 2, 3

(20)

(154) total

Im - 1, 4, 1, 3, 2, 2, 2, 5, 1, 1, 3, 1

1, 1, 1, 3, 2, 3, 4, 3, 2, 2, 2, 1, 2, 1

1, 3, 1, 3

(63)

Brown Booby 3, 2, 3, 1, 4, 1, 1, 1, 1, 1

(19)

General

The shorebirds seem to be wintering here rather than just passing through. They can be approached to within 10 feet or so without flying off. No large flocks of birds were seen, mostly 2's and 3's.

Most R.T. were observed feeding along the tide line. The W.T. were observed foraging about the rocks on the inter-tidal zone.

The Golden Plovers were seen inland off the beach. No large flocks were noted. One flock of 7-8 B.T.C. was seen at the south end of the island on 19 Nov. They were flushed inland away from the shoreline.

R.T.B. - Nest sites were worked and repainted. Several adults were returned and color coded.

Sooty Tern. Individuals were shot on 20 Nov and well be examined for gonad and other measurements.

L.F. The colony seems to have progressed successfully since the Oct trip. ~~the~~ Over 90% of the ~~birds~~ last months large chicks are now locally. Banded birds have had leg swelling around the band. Colony size seems to be about the same as last.

months. ~~They~~

One ~~♂~~ Lesser
was observed with
expanded Gular
Pouch - (display)
cls nesting Cycle
Starting Again
Fresh Eggs were at
a minimum.

RFB - Of the nests
observed (around
the L.F. colony)
 $\frac{1}{2}$ had eggs and
the other $\frac{1}{2}$ downy
chicks. Approx 10-15
nests checked.
4 immatures were
noted.

BB - mostly eggs
and small chicks
were noted in
nest sites.

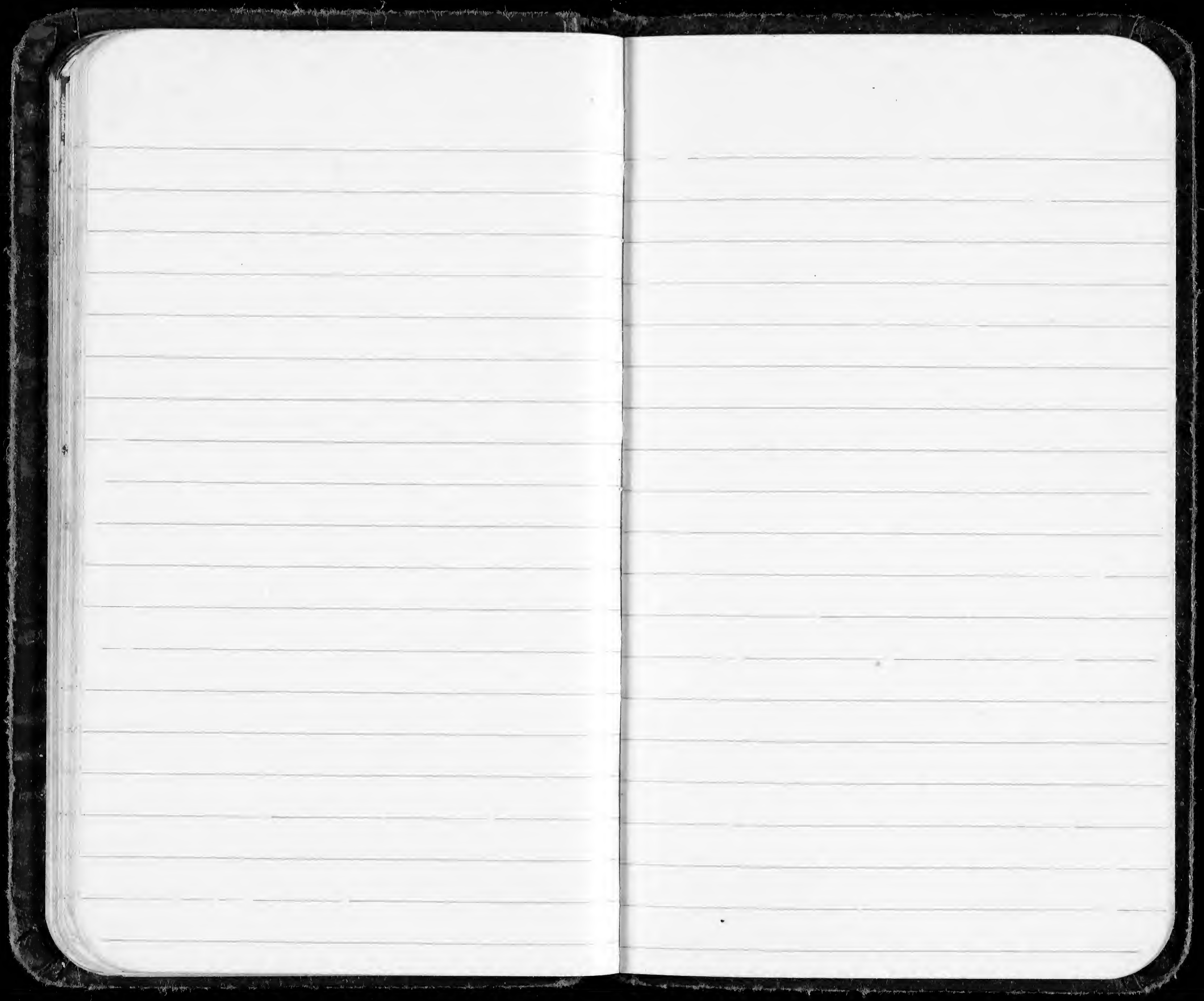
Vegetation The island
appears to be much
drier than Oct. The
grass is shorter
and not as green.

Spinks - seem to
be more abundant
than Oct. No count
taken but several
per square foot
were noted at the
northern end of the
island.

NOTE:

20 Nov. nocturnal
while working the
SW corner for booby
returns at least
one cat was observed.
All during this time
the Boobies had been
extremely jumpy.
The moon had set
and my head lamp
made them fly as
soon as it was pointed
their way. There was
no concrete evidence

of cat predation but
it seems as if the
Boobies were nervous
due to its presence,
and probably noise.
We had watched this
end just the previous
night



$$\begin{array}{r}
 243 \\
 \hline
 648 \overline{) 168000} \\
 \underline{1396} \\
 2840 \\
 \underline{2592} \\
 2480
 \end{array}$$

$$\begin{array}{r}
 243 \\
 \times 60 \\
 \hline
 14580
 \end{array}$$

$$\begin{array}{r}
 288 \overline{) 168000}
 \end{array}$$

Lesser

Frigate

Colony

Estimation

$$225 \times 250 =$$

$$250 \times 450 =$$

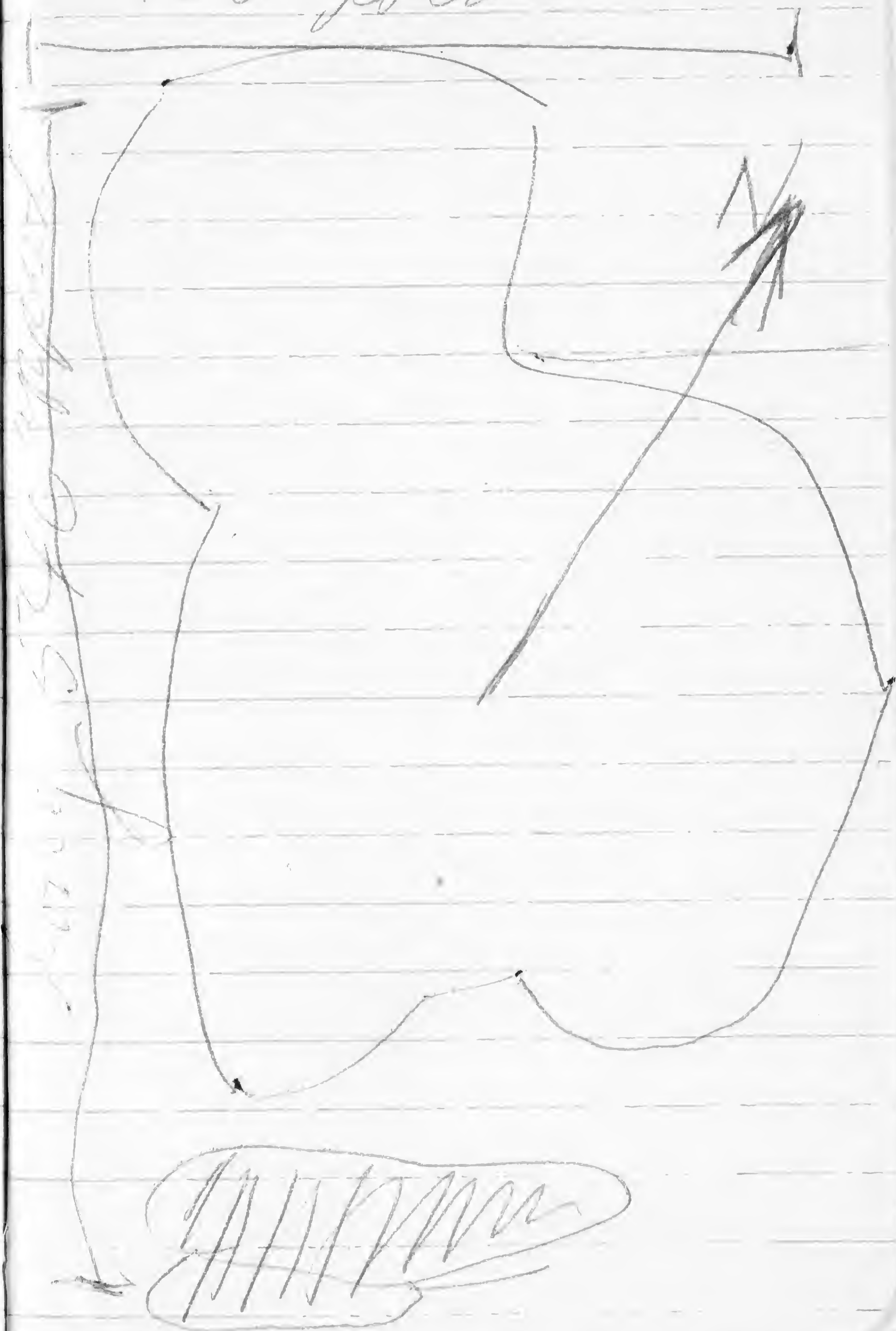
$$\begin{array}{r} 16x \\ 18 \\ \hline 128 \\ 16 \\ \hline 288 \end{array}$$

$$\begin{array}{r} 450 \\ 2250 \\ \hline 22500 \\ 900 \\ \hline 112500 \end{array}$$

$$\begin{array}{r} 222 \\ 250 \\ \hline 11100 \\ 444 \\ \hline 55500 \end{array}$$

$$\begin{array}{r} 55500 \\ 112500 \\ \hline 168000 \end{array}$$

450' wide



$\overset{3}{375}$ $\overset{3}{375}$ $\overset{4}{375}$
 $\frac{2250}{1}$ $\frac{2250}{1}$ $\frac{2800}{1}$
 60-80 birds

birds

area
 8' x 8' area
 27' x 24'

225

250

$\overset{4}{648}$
 $\frac{20}{5}$
 3240

375

$\overset{2}{27}$
 $\frac{24}{108}$
 54

540

$\frac{2430}{2}$

2250

2700

2160

(648) 243000

243,000

375.

$\overset{2}{648} \mid 243,000.$
 1944

1944

648

37

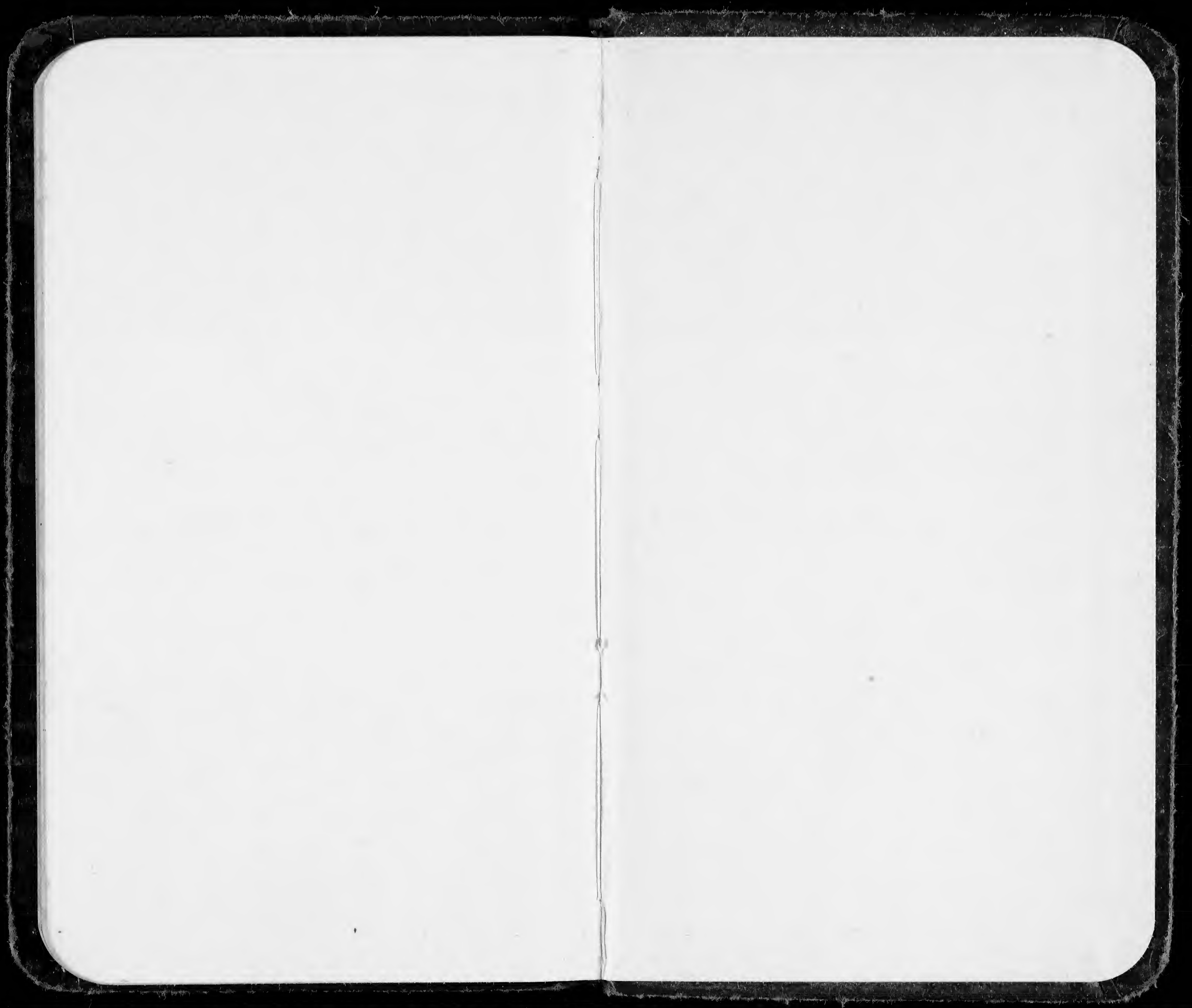
4536

4860

4536

3240

3240



7530-222-0078
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